COUNTY OF LOS ANGELES Public Health

THE PUBLIC'S HEALTH

Newsletter for Medical Professionals in Los Angeles County

January 2009

Protect Your Patients Against Late-Season Influenza

BACKGROUND

The Centers for Disease Control and Prevention (CDC) recommends that influenza (flu) vaccination efforts continue into the spring, as long as cases of flu occur in the community. Flu seasons vary in length and severity but seasonal flu typically occurs during the fall or winter months with peak activity usually occurring in January or later. In addition, more than one wave of influenza can occur in communities. Thus a decline in flu illnesses during the fall or winter might be followed by an increase months later. As a result, providers are encouraged to continue flu vaccination clinics through December and later to protect patients throughout the entire season.

Although flu vaccinations are recommended for all persons six months of age and older, special attention should be given to vaccinating persons that have the greatest risk of catching and spreading the flu as well as those who are most

likely to suffer from flu complications. Healthcare providers that serve such persons are especially encouraged to continue flu vaccinations late into the season. In addition, any health care worker who has not yet been vaccinated against the flu should seek vaccination now.

PERSONS AT GREATEST RISK FOR SPREADING THE FLU OR EXPERIENCING COMPLICATIONS

School-age children play a significant role in the spread of flu in communities. Every year, 5% - 20% of people in the United States get the flu and school-age children are up to four times more likely to be infected. For this reason, for the first time this season, the Advisory Committee on Immunization Practices (ACIP) expanded flu vaccination recommendations to include all children and adolescents 5 through 18 years of age. Annual flu vaccination efforts should also include healthy children 6-59 months of age, as well as

Continued on page 5

Announcement: Senate Joint Resolution 19 Requires that Health Professionals Be Notified About the Consequences of Participating in Torture

On August 14, 2008, the California Legislature Senate Joint Resolution 19: Health Professionals and Torture (SIR 19), which requests that all relevant California agencies, including, but not limited to, health-related boards under the Department of Consumer Affairs, notify Californialicensed health professionals about their professional, ethical, and legal obligations with regard to torture and the cruel and inhumane treatment of detainees in U.S. military prisons.

Specifically, the California Legislature stated its intention that every California health-related agency bearing responsibility for licensing



Continued on page 2

THE PUBLIC'S HEALTH



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Announcement...from page 1

health care professionals notify their licensees of the following via newsletter, e-mail, web site, or existing notification processes:

- That California-licensed health professionals are absolutely prohibited from knowingly planning, designing, participating in, or assisting in the use of condemned techniques at any time and may not enlist others to employ these techniques to circumvent the prohibition.
- Common Article III of the Geneva Conventions; the United Nations Convention against Torture and Other Cruel, Inhuman, or Degrading Treatment or Punishment (CAT); and the amended War Crimes Act all proscribe the use of torture. The War Crimes Act specifically prohibits the torture of, and the cruel, inhuman, and degrading treatment or punishment of, detainees in United States custody.
- That California-licensed health professionals who participate in coercive or enhanced interrogation or torture, as defined by CAT, or other forms of cruel, inhuman, or degrading treatment or punishment, may one day be subject to prosecution.
- That if any California-licensed health professional has reason to believe that interrogations are coercive or "enhanced" or involve torture or cruel, inhuman, or degrading treatment or punishment, that they report their observations to the appropriate authorities, and if the authorities are aware of those abusive interrogation practices, but have not intervened, then those health professionals are ethically obligated to report those practices to independent authorities that have the power to investigate and adjudicate those allegations.
- That no law, regulation, order, or exceptional circumstance, state of war or the threat of war nor internal political instability, or any other public emergency, can be invoked as a justification for torture or cruel, inhuman, or degrading treatment or punishment.
- That California-licensed health professionals should continue to provide appropriate health care if called upon to deal with a victim of the conduct and torture described in this resolution.

In view of the ethical obligations of health professionals, and the record of abusive interrogation practices by the United States military and other federal agencies and the Legislature's interest to protect California-licensed health professionals, the California Legislature also requests that the United States Department of Defense and the Central Intelligence Agency remove California-licensed health professionals from participating in any way in prisoner and detainee interrogations that are coercive or "enhanced" or that involve torture or cruel, inhuman, or degrading treatment or punishment, as defined by the Geneva Conventions, CAT, relevant jurisprudence regarding CAT, and related human rights documents and treaties.

The Secretary of the Senate has transmitted copies of SJR 19 to the United States Department of Defense, the Central Intelligence Agency, and all relevant California agencies, including, but not limited to the Board of Behavioral Sciences, the Dental Board of California, the Medical Board of California, the Osteopathic Medical Board of California, the Bureau of Naturopathic Medicine, the California State Board of Pharmacy, the Physician Assistant Committee of the Medical Board of California, the California Board of Podiatric Medicine, the Board of Vocational Nursing and Psychiatric Technicians, the Board of Psychology, and the Board of Registered Nursing.

Adapted from a bill introduced by State Senator Ridley-Thomas and filed with the Secretary of State, August 18, 2008.

For more information, visit the California State Legislature at http://www.legislature.ca.gov/

Selected Food Toxins: An Update for Clinicians

The largest pet food recall in US history occurred in 2007. Hundreds of cats and dogs contracted a fatal kidney disease after consuming pet food contaminated with melamine and cyanuric acid (Cyanuric acid may have been generated during melamine production or as a degradation product).



A widespread recall of suspect foods was initiated prior to identification of the toxin.

Subsequent investigation revealed melamine and cyanuric acid both in the suspect foods and in the imported wheat gluten used in the manufacture of those foods. This discovery led to further product recalls. Melamine, a fake protein, was likely added to increase the nitrogen content of wheat flour or poor-quality wheat gluten.

Of 64 animal cases reported to the Los Angeles County Department of Public Health, 20 died, with a case fatality proportion of 31%. Of the confirmed cat cases, 48% died, more than twice the percentage of dogs (17%). The majority of case onsets occurred in the first three weeks of March 2007.

Pennsylvania Cat Colony Provides More Information

A well-defined population of 70 cats that were inadvertently exposed to dietary melamine and cyanuric acid in commercially prepared wet-food canned or pouched diets, provided more information to disease detectives from the University of Pennsylvania in 2007.

The most consistent clinical and pathologic abnormalities were associated with the urinary tract, specifically tubular necrosis and urinary crystals. Organs other than the kidney were generally unaffected in cats. Of the kidneys examined, all had clusters of gold-brown crystals.

Melamine was detected both in the diets fed to the cats in the study and in samples of imported wheat gluten used in the manufacture of those diets. It was also detected in kidney and urine samples from affected cats.

Animals provided an alert that there was a flaw in our FDA safety system. Some local animals that consumed the food tainted with a fake protein became ill and many developed acute renal failure with high death rates.

China Reports Death of Infants and Dogs Due to Melamine in 2008

A scandal broke in China following the summer Olympics, when it emerged that melamine, an industrial chemical normally used to make plastics and glues, had been added to baby milk formula and other dairy products to make them appear richer in protein. The infants developed kidney disease and many had kidney stones. The Chinese government estimated 54,000 cases, 14,000 hospitalizations and four deaths from kidney failure among infants fed formula laced with melamine. China's premier, at the end of October 2008, announced efforts to improve food safety, saying that tainted milk products due to a failure of industry regulation was the source of the widespread illness that killed four babies and sickened thousands of children.

Exotic Animals at Risk

In 2008, some 1,500 Raccoon dogs in northeast China died after eating animal feed tainted with melamine. All of the canines died on farms in one village. Post-mortem examination on the dogs revealed that the animals died of kidney failure. About a fourth of the stones in the dogs' kidneys were made of melamine. These results are similar to those found in animals dying of renal disease following ingestion of contaminated feed in the United States in 2007.

The Raccoon dog is a wild species indigenous to East Asia. Raccoon dogs take their name from their fur, which resembles that of raccoons. The fur is used to make clothing, especially coats. Their populations have declined in recent years due to hunting, fur trade and fur trapping, and urbanization. Some Raccoon dogs are raised commercially in China for their fur.

Other food additives have caused problems in animals. In 1932, a new disease called Chastek paralysis was recognized in foxes raised commercially for their fur. Within 48 hours foxes would develop extensive spastic paralysis and be unable to rise. Convulsions often occur shortly before death. The cause of the disease was determined to be a nutritional deficiency of vitamin B1 (thiamine) induced by feeding certain types of raw fish that contain the enzyme thiaminase.

One Health

Milk adulteration has a long history and melamine has been fraudulently added to animal feed for years. What happened in China is analogous to what occurred in the United States during the late 19th century with unregulated industrialization. Checks on rampant food adulteration only became possible after Upton Sinclair's book, "The Jungle," induced the nation and Congress to pass food and drug laws in 1906.

In 2007, the "One-Health" team was developed by the AMA and AVMA to create more educational and research collaborations between physicians and veterinarians. "One-

Continued on page 4

Selected Food Toxins... from page 3

Health" is not a new idea. It has existed for centuries. Previously coined "One-Medicine", it aims to promote and implement comparative biomedical research, meaningful collaboration and communication between human medical, veterinary and allied health professionals and scientists.

These events in China and he US have decreased consumer confidence and have raised questions about the country's food safety. "One Health" aims to assist in restoration of the faith in the country's food supply through its collaborative efforts.

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Safe Injection Practices: Update for Physicians and Medical Facilities

There are several healthcare settings in which patients may receive injections of medications, including doctor's offices, hospitals, skilled nursing facilities and dialysis centers. Bacterial, fungal, or viral pathogens, including hepatitis B and C, may be transmitted to patients if injections are not administered using appropriate infection control measures. Lapses in infection control, such as reusing the same needle or syringe on multiple patients, have resulted in outbreaks of viral hepatitis. A recent report from Nevada described an outbreak of hepatitis C infections among patients who had undergone gastrointestinal endoscopy procedures. The investigation identified reuse of syringes which may have contaminated a medication vial that was used on multiple patients. Approximately 40,000 potentially exposed persons were notified as a result of this outbreak, highlighting the possible extent of infected persons.1

The Centers for Disease Control and Prevention (CDC) has published information on safe injection practices and advises that single-use injectable medications and solutions are to be used only on a single patient and should be entered only once. If possible, multidose medication vials should be dedicated to a single patient only. In addition, preparation of medications should occur in a clean area, separate from patient care areas. ² Compliance with these recommendations greatly reduces the risk transmission of pathogens in healthcare settings.

Effective October 14, 2008, dialysis facilities must follow CDC recommendations published in 2001 that describe appropriate injection practices in order to receive Medicare

payment for outpatient dialysis services.³ While these rules specifically apply to dialysis facilities, it is important for all healthcare providers to review their infection control practices to ensure patient safety is not compromised.

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Protect Your Patients Against Late-Season Influenza...from page 1

children with chronic illnesses such as asthma, diabetes, or who are immunocompromised. As a reminder, children 6 months through 9 years of age who are getting vaccinated for the first time should receive two doses of flu vaccine at least 28 days apart. When such children receive only one dose of flu vaccine, they may not be fully protected against the flu virus.

Women who will be pregnant anytime during the flu season should be vaccinated against the flu. Hospitalization rates due to flu-related complications are four times higher in pregnant women than in non-pregnant women. As such, prenatal providers should consider vaccination for all pregnant women. Women who were not vaccinated during their pregnancy can receive a vaccination after delivery to help protect their newborn infants who would be too young to be vaccinated and would be at risk for serious complications from the flu.

Other high-risk categories of persons who should receive an annual flu vaccination include:

- Persons who have chronic pulmonary conditions (including asthma); cardiovascular disease (except hypertension); renal disease; hepatic disease; hematological or metabolic disorders, including diabetes mellitus;
- Persons who have immunosuppression including immunosuppression caused by medications or by the human immunodeficiency virus;
- Persons who have any condition (e.g., cognitive dysfunction, spinal cord injuries, seizure disorders, or other neuromuscular disorders) that can compromise respiratory function or the handling of respiratory secretions or that increase the risk for aspiration;
- Residents of nursing homes and other chronic-care facilities;
- Household contacts or persons who have direct contact with any of the persons listed above, including healthcare providers.

PROVIDER ROLE

A health care provider's recommendation has been found to have great influence on patient influenza vaccination rates. Please encourage all of your patients who have not yet been vaccinated to get vaccinated now.

- Remind your patients that even if they were vaccinated last year, an annual flu vaccination is recommended to protect themselves and their families from the flu.
- Stress that vaccination into the spring can protect them at the time when they face the greatest chance of getting the flu.
- If you encounter patients who do not have insurance coverage for vaccines, you may refer them to LA County's information line at 2-1-1 from any land line or cell phone. These individuals may be eligible for reduced-cost or nocost vaccines.

Encourage your staff to get vaccinated to protect themselves and to keep from spreading the flu to their patients.

RESOURCES

If you would like more information on the 2008-09 flu vaccine recommendations or licensed flu vaccines, contact the Immunization Program at 213-351-7800 or visit our website at http://publichealth.lacounty.gov/ip/flu/index.htm.

To access free patient education materials, you may also visit the CDC's Seasonal Flu website at www.cdc.gov/flu.

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Influenza and Pneumococcal Vaccines Important for Smokers

Cigarette smoke has pro-inflammatory and immunosuppressive effects. Both active and passive cigarette smoke exposure are linked to an increased incidence and severity of respiratory viral and bacterial infections. The risk of both influenza and community-acquired pneumonia (CAP) attributable to smoking is 30-35%. Former smokers had a 50% reduction in the odds ratio for CAP 5 years after the cessation of smoking. Therefore, influenza and pneumococcal vaccine are especially important for smokers and those exposed to second-hand smoke.

This would be a good time to discuss smoking cessation and the importance of smoke-free homes, and to give a referral to the California Smokers' Helpline 1-800-NO-BUTTS to all smokers. The Helpline doubles the effectiveness of attempts to become free of tobacco. The combination of the Helpline with medications leads to a one year success rate of 30-40% vs. 5-8% without meds or counseling.

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New Guidelines Double Recommended Amount of Vitamin D for Infants, Children, and Adolescents

On October 14, 2008, the American Academy of Pediatrics (AAP) doubled the amount of vitamin D it recommends for infants, children and adolescents. The new clinical report, "Prevention of Rickets and Vitamin D Deficiency in Infants, Children, and Adolescents," recommends for all children to receive 400 IU a day of vitamin D, beginning in the first few days of life.¹

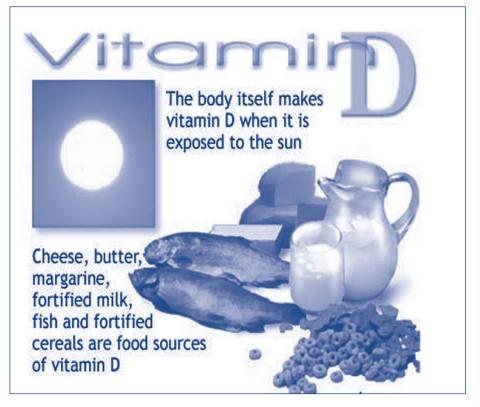
The previous recommendation, issued in 2003, called for 200 IU per day. The change in recommendation comes after reviewing new clinical trials on vitamin D and the historical precedence of safely giving 400 IU per day to the pediatric population.² A recent study revealed that 12% of American infants and toddlers are deficient in vitamin D.⁴ The main source of vitamin D is sunlight, synthesized in the skin. However, doctors say that vitamin D deficiency is widespread because of the widespread use of sunscreen - in order to

avoid skin cancer - or not outdoors enough to soak up the right amount.

Vitamin D's primary role is helping the body absorb and use calcium for skeletal support. But recent research has been showing it also has a potential impact on the development of some chronic diseases including heart disease, high blood pressure, diabetes mellitus, inflammatory and autoimmune diseases, and cancer.⁵ Although the mechanism is unclear, evidence is mounting that maintaining adequate vitamin D levels through childhood may decrease the development of a variety of chronic conditions of adulthood or may help the body fend off the onset of some chronic diseases.

"We are doubling the recommended amount of vitamin D children need each day because evidence has shown this could have life-long health benefits," said Frank Greer, MD, FAAP, chair of the AAP Committee on Nutrition and coauthor of the report, "Supplementation is important because most children will not get enough vitamin D through diet alone."

"Breastfeeding is the best source of nutrition for infants. However, because of vitamin D deficiencies in the maternal diet, which affect the vitamin D in a mother's milk, it is important that breastfed infants receive supplements of vitamin D," said Carol Wagner, MD, FAAP, member of the AAP Section on Breastfeeding Executive Committee.¹



The new recommendations include:2

- Breast-fed and partially breast-fed infants should be supplemented with 400 IU a day of vitamin D beginning in the first few days of life.
- All non-breastfed infants, as well as older children, who are consuming less than one quart per day of vitamin D-fortified formula or milk, should receive a vitamin D supplement of 400 IU a day.
- Adolescents who do not obtain 400 IU of vitamin D per day through foods should receive a supplement containing that amount.

Most commercially available milk is fortified with vitamin D, but most children do not drink enough of it — four cups daily are needed — to meet the new requirement. Equally, it is important to supplement breast-fed infants who might have vitamin D deficiencies due to deficiencies in the maternal diet. Vitamin D is sold in capsules and tablets, as well as in drops for young children. Non-prescription vitamin D supplements are available in the United States as either Vitamin D2 Ergocalciferol or Vitamin D3 Cholecalciferol.

New Guidelines Double Recommended...from page 6

Challenging the view that vitamin D3 is more potent than D2, recent studies have now revealed that both forms are equally effective sources.³

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Food Sources of Vitamin D⁶

Food	Serving	Vitamin D (IU)
Milk	1 cup	100
Fortified rice or soy beverage	1 cup	80
Fortified orange juice	1/2 cup	45
Fortified margarine	2 tsp	51
Egg yolk	1	25
Herring or trout, cooked	75 g	156
Mackerel, cooked	75 g	80
Salmon, Atlantic, cooked	75 g	225
Salmon, canned or cooked*	75 g	608
Sardines, Atlantic, canned	75 g	70
Sardines, Pacific, canned	75 g	360
Tuna, canned, light or white	75 g	41
Tuna, canned, yellowfin (albacore, ahi)	75 g	105
Tuna, skipjack, cooked	75 g	381
Tuna, bluefin, cooked	75 g	690
* includes Chinook, Coho, Humpback (pink), Sockeye		

Physician Registry

Become a Member of the Health Alert Network

The Los Angeles County Department of Public Health urges all local physicians to register with the Health Alert Network (HAN). By joining, you will receive periodic email updates alerting you to the latest significant local public health information including emerging threats such as pandemic influenza. Membership is free. All physician information remains private and will not be distributed or used for commercial purposes.

Registration can be completed online at www.lahealthalert.org or by calling 323-890-8377.

Be aware of public health emergencies! Enroll now!

Protect Your Patients Against Late-Season Influenza	.1
Announcement: Senate Joint Resolution 19 approved	.1
Selected Food Toxins: An Update for Clinicians	.3
Safe Injection Practices: Update for Physicians and	
Medical Facilities	4
Influenza and Pneumococcal Vaccines Important	
for Smokers.	.5
New Guidelines for Vitamin D for Infants, Children, a	

This Issue... THE PUBLIC'S HEALT





Attention Readers:

The Annual Reporting Issue, usually published every January, will be published later this year. We will delay publication of this Issue until the Communicable Disease Control - Reportable Disease Committee of the California Conference of Local Health Officers (CCLHO) has met and updated its recommendations for reportable diseases.

The 2007 public health annual report of communicable diseases reported in Los Angeles County is now available online at http://publichealth.lacounty.gov/acd/Report.htm

Everyone benefits from flu vaccination!

In past seasons, influenza vaccination focused on reaching those most vulnerable—but the best protection doesn't stop there. The Los Angeles County Department of Public Health and the CDC urge everyone* to get their flu shot! Universal vaccination is not only important for personal protection, but also prevents the spread of disease to others, improving the health of our whole community. Similarly, there are broad-reaching benefits of vaccinating pregnant women. Not only are the moms protected, but their babies also show a significant reduction in influenza-related illness. The benefits of flu vaccination for pregnant women is 2 for 1!

To find a flu shot in your area: call the LA County information line at 211 or visit

www.lapublichealth.org/ip/index.htm

* Influenza vaccination is not recommended for: children younger than 6 months in age, people with a severe allergy to chicken eggs, and people with a history of Guillain-Barré syndrome.